



**FACULTY OF ENGINEERING
CHULALONGKORN UNIVERSITY
FIRE SAFETY RESEARCH CENTER**



- TYPE OF TEST** : DETERMINATION OF THE FIRE RESISTANCE OF NON-LOADBEARING ELEMENTS OF CONSTRUCTION
- TEST SPECIMEN** : SUPA RICH STEEL DOOR (MODEL SD1)
The specimen is a Supa Rich steel door (Model SD1) with a single-sided door leaf of dimension 900 mm x 2000 mm x 40 mm. The specimen was mounted in a 15 cm thick reinforced concrete wall, which was installed to the 3 m x 3 m testing frame. The details of the specimen are shown in Appendix C. The specimen was provided and installed by the client.
- TRADEMARK** : SPR
- CLIENT** : **SUPA RICH LIMITED PARTNERSHIP**
1205 Prachacean Soi36, Prachacean Road
Bangsae, Bangkok 10800
Thailand
- DATE OF TEST** : May 8, 2008
- TEST MACHINE** : Large-scale vertical furnace (Fire Tester III) at the Fire Safety Research Center (FSRC), Department of Civil Engineering, Chulalongkorn University (Thailand). The furnace is capable of producing a standard temperature-time relationship according to several fire resistance standards including BS 476 Part 20: 1987.
- TEST METHOD** : The testing procedures follow the British Standard BS 476: Fire tests on building materials and structures
BS 476 Part 20: 1987: Method for determination of the fire resistance of elements of construction (general principles)
BS 476 Part 22: 1987: Methods for determination of the fire resistance of non-loadbearing elements of construction Section 6: Determination of the fully insulated doorsets and shutter assemblies.
- TEST RESULTS** : The non-loadbearing element of construction described above has the fire resistance of each criterion for the period stated:
(The test results are good only for the specimen tested.)

Criteria	Fire Resistance (hr:min)	Remarks
Insulation	0:45	The average temperature of the unexposed face of the specimen exceeded 140°C above its initial value of 49 °C.
Integrity	3:10	Sustained flaming at the top-middle edge of the specimen

Tested by:

(Assistant Prof. Dr. Suched Likitlersuang)

(Associate Prof. Dr. Chadchart Sittipunt)

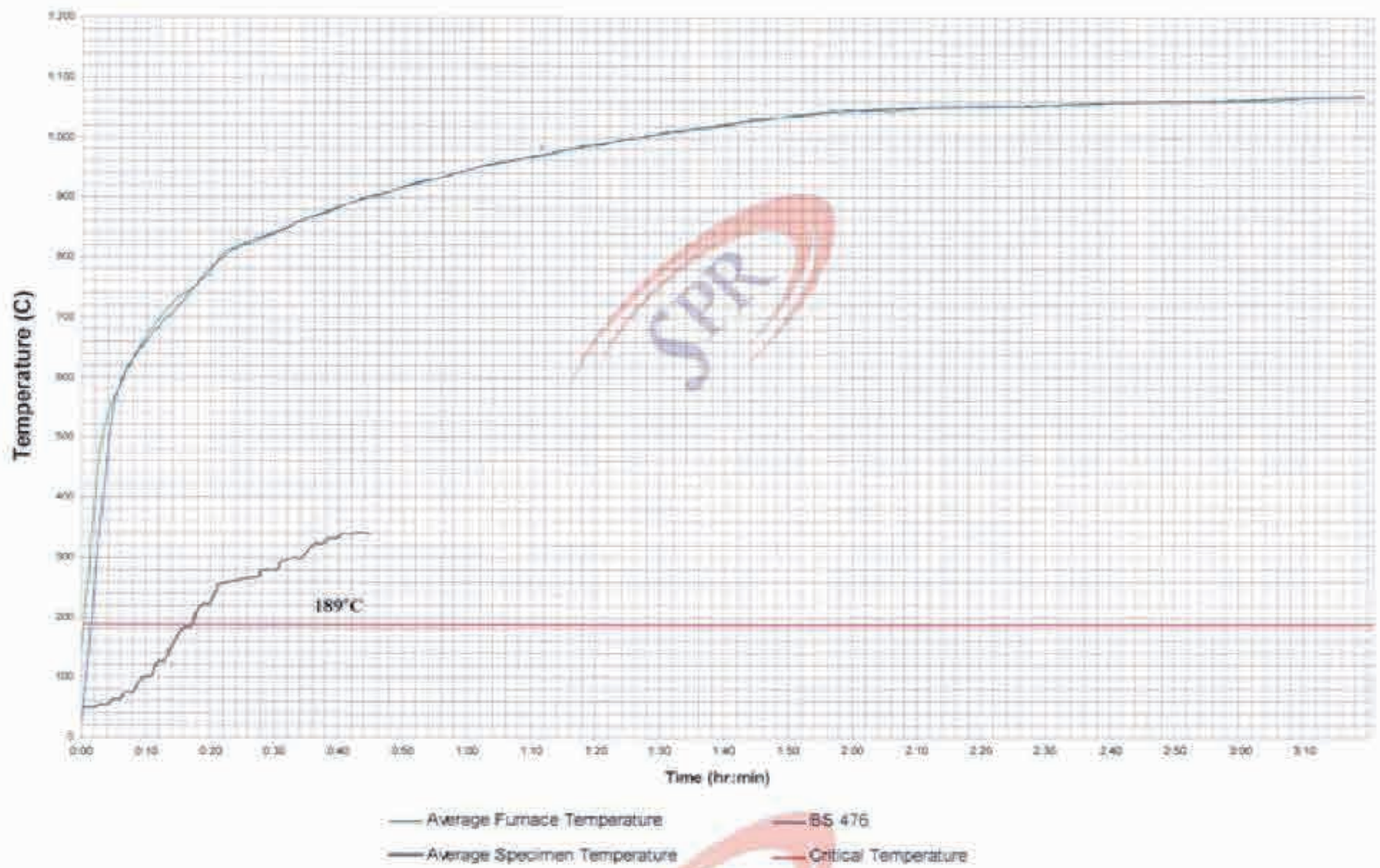
Date: May 28, 2008

(Associate Prof. Dr. Thanawat Pothisiri)

(Assistant Prof. Dr. Chaman Chintanapakdee)

On Behalf of Head of Civil Engineering Department

FURNACE TEMPERATURE



(Mr. Sitthiphong Promprasit)
Authorized Testing Officer